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1/1 - (C) FILE ZCAPLUS

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DN - 140:218572

TI - Synthesis of trifluorostyrene derivatives as polymer monomers for proton exchange resins

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CODEN: CNXXEV

DT - Patent

LA - Chinese

FAN.CNT 1

PATENT NO.

	KIND	DATE	APPLICATION NO.	DATE
PN - <u>CN1349962</u>	A	20020522	CN 2001-132099	20011102
PRAI- CN 2001-132099		20011102		
OS - MARPAT 140:218572				

AB - The title monomers are trifluorostyrene derivs. having meta-C2-6 perfluoroalkyl or/and meta-(CF<sub>2</sub>CF)<sub>n</sub>OCF<sub>2</sub>CF<sub>2</sub>SO<sub>2</sub>F (Rf) (n=1-4) groups and are synthesized by steps of (1) coupling iodobenzene with iodoalkane derivs. in the presence of Cu at 60-120.degree. for 15-40 h; (2) nitrating the intermediate with HNO<sub>3</sub>/H<sub>2</sub>SO<sub>4</sub> at 30-60.degree. for 15-40 h, (3) reducing with SnCl<sub>2</sub>.cntdot.2H<sub>2</sub>O/concd. HCl at 30-80.degree. for 0.5-2.0 h to m-Rf-aminobenzene, (3) diazotizing at -5.degree. for 1.0-5.0 h, substituting with KI at 45-75.degree. for 0.5- 2.0 h to obtain m-Rf-iodobenzene, and (4) coupling the compd. with CF<sub>2</sub>=CFZnBr in the presence of palladium-based catalyst. The monomers can be used for the proton exchange resin for the proton exchange membrane of fuel cells.

IT - \*\*\*664327-26-8DP\*\*\*, sulfonated  
 RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); TEM (Technical or engineered material use); PREP (Preparation); PROC (Process); USES (Uses)  
 (prepns. of proton exchange resins from trifluorostyrene derivs. bearing meta-perfluoroalkyl substituents)

RN - 664327-26-8 ZCAPLUS

CN - Ethanesulfonyl fluoride, 2-[[1,1,2,2,3,3,4,4,5,5,6,6-dodecafluoro-6-[3-(trifluoroethenyl)phenyl]hexyl]oxy]-1,1,2,2-tetrafluoro-, polymer with (trifluoroethenyl)benzene and 1-(trifluoroethenyl)-3-(trifluoromethyl)benzene (9CI) (CA INDEX NAME)

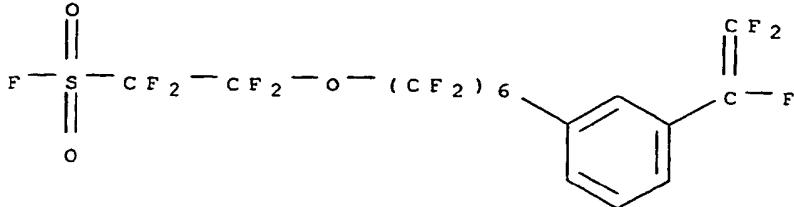
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CRN 664327-21-3

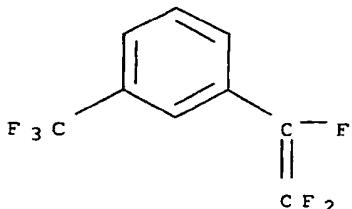
CMF C16 H4 F20 O3 S

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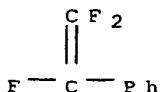
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CM 2

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CM 3

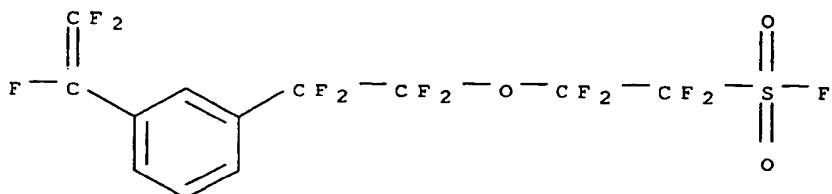
CRN 447-14-3  
CMF C8 H5 F3

IT \*\*\*664327-25-7P\*\*\*

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
(preprns. of trifluorostyrene derivs. bearing meta-perfluoroalkyl substituents as polymer monomers for proton exchange resins)

RN 664327-25-7 ZCAPLUS

CN Ethanesulfonyl fluoride, 1,1,2,2-tetrafluoro-2-[1,1,2,2-tetrafluoro-2-[3-(trifluoroethenyl)phenyl]ethoxy]- (9CI) (CA INDEX NAME)

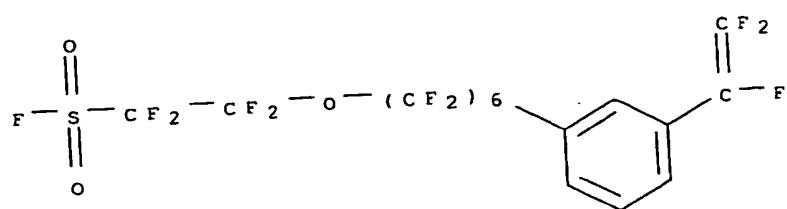


IT \*\*\*664327-21-3\*\*\*

RL: RCT (Reactant); RACT (Reactant or reagent)  
(preprns. of trifluorostyrene derivs. bearing meta-perfluoroalkyl substituents as polymer monomers for proton exchange resins)

RN 664327-21-3 ZCAPLUS

CN Ethanesulfonyl fluoride, 2-[[1,1,2,2,3,3,4,4,5,5,6,6-dodecafluoro-6-[3-(trifluoroethenyl)phenyl]hexyl]oxy]-1,1,2,2-tetrafluoro- (9CI) (CA INDEX NAME)



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